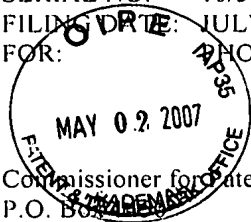


PCT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Roland KELLNER et al.  
SERIAL NO: 10/501,077  
FILING DATE: JULY 9, 2004  
FOR: PHOSPHOAMIDASE ASSAY

GAU: 1657  
EXAMINER: MARTIN, Paul C.



AMENDMENT TRANSMITTAL

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

SIR:

Transmitted herewith is an amendment in the above-identified application.

- ☐ No additional fee is required.
- ☐ Applicant(s) is/are entitled to small entity status.
- ☒ Additional documents filed herewith: Reply

The fee has been calculated below:

CLAIMS	CLAIMS REMAINING		HIGHEST NO. PREVIOUSLY PAID FOR	NO. OF EXTRA CLAIMS	RATE		CALCULATIONS	
TOTAL	18	MINUS	20	0	x	\$50 =	\$0.00	
INDEPENDENT	5	MINUS	4	1	x	\$200 =	\$200.00	
	<input type="checkbox"/> PETITION FOR EXTENSION OF TIME						\$0.00	
	TOTAL OF ABOVE CALCULATIONS						\$200.00	
	<input type="checkbox"/> REDUCTION BY 50% FOR FILING BY SMALL ENTITY						\$0.00	
	<input type="checkbox"/> RECORDATION OF ASSIGNMENT					+	\$40 =	\$0.00
	TOTAL						200.00	

- ☒ A check in the amount of \$200.00 is attached.
- ☒ Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to Deposit Account No. 13-3402. A duplicate copy of this sheet is enclosed.
- ☒ If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.36 for any necessary extension of time may be charged to Deposit Account No. 13-3402. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Anthony J. Zelano, Reg. No. 27,969  
Attorney/Agent for Applicants

05/08/2007 JBALINAN 00000089 10501077

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MILLEN, WHITE, ZELANO  
& BRANIGAN, P.C.  
Arlington Courthouse Plaza I  
2200 Clarendon Blvd. Suite 1400  
Arlington, Virginia 22201  
Telephone: (703) 243-6333  
Facsimile: (703) 243-6410  
Date: April 1, 2007

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the U.S. Postal Services as First Class Mail in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on: April 30, 2007  
Name: James W. Branigan  
Signature: [Handwritten Signature]



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

**Roland KELLNER et al.**

Examiner: MARTIN, Paul C.

Serial No.: 10/501,077

Group Art Unit: **1657**

Filed: JULY 9, 2004

Title: **PHOSPHOAMIDASE ASSAY**

**REPLY**

MAIL STOP AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Office Action mailed on January 31, 2007, please amend the claims as follows and consider the remarks.

**Amendments to the Claims** are reflected in the listing of claims which begins on page 3 of this paper.

**Remarks/Arguments** begin on page 6 of this paper.

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the U.S. Postal Services as First Class Mail in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on: April 30, 2007

Name: Roland Kellner et al.

Signature: Roland Kellner et al.

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:** Please amend the claims as follows:

**We claim:**

**Claim 1. (Currently Amended)** A method for the detection, characterization and qualitative and/or quantitative determination of the activity of a phosphoamidase enzyme, comprising hydrolyzing a phospho-ester bond (P-O) of at least one of the substrates ~~selected from the group consisting of~~ which is FDP (fluorescein diphosphate), DDAO (9H-(1,3-dichloro-9,9-dimethyl-acridin-2-one-7-yl)phosphate), DiFMUP (6,8-difluoro-4-methylumbelliferyl phosphate), ELF<sup>®</sup>39 phosphate (2-(2'-phosphophenyl)-4-(3H)-quinazolinone) ~~and or~~ ELF<sup>®</sup>97 phosphate (2-(5'-chloro-2'-phosphophenyl)-6-chloro-4-(3H)-quinazolinone) and correlating the resultant hydrolysis level with the phosphoamidase activity of said enzyme.

**Claim 2. (Previously Presented)** A method of claim 1 wherein the phosphoamidase is a protein phospho-amidase.

**Claim 3. (Previously Presented)** A method of claim 2 wherein the protein phosphoamidase is a protein histidine phosphoamidase (PHP).

**Claim 4. (Previously Presented)** A method of claim 3 wherein the protein histidine phosphoamidase is PHP1.

**Claim 5. (Currently Amended)** A method for the identification of an inhibitor or activator of a phosphoamidase comprising ~~the steps:~~

- a) establishing a sample comprising a phosphoamidase and a test substance,
- b) administering a substrate selected from the group consisting of FDP, DDAO, DiFMUP, ELF<sup>®</sup>39 phosphate and ELF<sup>®</sup>97 phosphate to the sample,
- c) detecting the signal produced by the hydrolysis of the phospho-ester bond (P-O) of the substrate, and